3.2 GCCS JOPES Core Mission Applications

JOPES applications can be accessed from the JOPES navigation window. These applications are used independently but interact through shared databases. JOPES Core Databases will reside at selected GCCS sites called GCCS Core Database sites. Other GCCS sites will access data residing at these GCCS Core Database sites.

- **3.2.1 Scheduling and Movement Database (SMDB).** SMDB is also known as the JOPES Core Database. This is the set of Oracle database tables within the GCCS Version 2.1 that supports the JOPES Applications. It is implemented only at sites designated as GCCS Core Database sites.
- **3.2.2 Scheduling and Movement (S&M).** S&M allows the user to review, update, schedule, and create manifests of both Transportation Component Command (TCC) carrier and organic movement data before and during deployment. It provides the capability to review and analyze an extensive variety of source requirements and S&M data. It allows improved in-transit tracking of all land, sea, and air carriers independent of Operational Plan (OPLAN) execution. Users can review, edit, or create schedules for non-cargo-capable carriers and the schedules and cargo allocations of cargo-capable carriers, as provided by the Air Mobility Command (AMC), the Military Traffic Management Command (MTMC), and the Military Sealift Command (MSC).
- **3.2.2.1 Initialization.** The S&M application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **S&M** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a Graphical User Interface (GUI)-based JNAV window, S&M is invoked by pressing the **START** icon next to "Scheduling & Movement" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, S&M is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Scheduling & Movement" text and pressing <enter>.
- **3.2.2.2 User Inputs.** User inputs to the S&M application include: modifications to carrier data elements, allocations, manifests, itineraries, remarks, and generation of scheduling reports.
- **3.2.2.3 System Inputs.** Time-Phased Force and Deployment Data (TPFDDs) sent from JOPES and various reference files including GEOFILE and TUCHA. Additional inputs include external system feeds of S&M associated data.
- **3.2.2.4 Termination.** Termination of S&M can be initiated from any S&M window by clicking on the F12 exit button.
- **3.2.2.5 Restart.** Not applicable.

- **3.2.2.6 Outputs.** Outputs from the S&M application include: modifications to carrier data elements, allocations, manifests, itineraries, and remarks.
- **3.2.3** Ad Hoc Query (AHQ). Provides users with an efficient means to develop and save tailored queries to extract data from the JOPES Core Database. It allows transportation and operations planning end-users to query S&M on the scheduling and moving of requirements for a given OPLAN. AHQ eliminates the need to know complex query language, database schema, and location of data elements needed for report generation.
- **3.2.3.1 Initialization.** The AHQ application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **AHQ** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, AHQ is invoked by pressing the **START** icon next to "Ad-Hoc Queries" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, AHQ is invoked by moving the cursor via the <tab> key to the START indicator immediately to the right of "Ad-Hoc Queries" text and pressing <enter>.
- **3.2.3.2** User Inputs. The user inputs to the AHQ application are based on operator actions to create, retrieve, modify, delete, and print queries and query families on scheduling and movement requirements for a given OPLAN.
- **3.2.3.3 System Inputs.** None.
- **3.2.3.4 Termination.** The AHQ application is terminated by pressing the <F12> function key or selecting the **Exit** command button on the AHQ main window.
- **3.2.3.5 Restart.** Not applicable.
- **3.2.3.6 Outputs.** The AHQ application produces three basic types of outputs regarding the scheduling and movement requirements for a given OPLAN:
 - Textual or graphical results of individual queries and query families viewed on the screen.
 - Textual or graphical results of individual queries and query families saved in user-named files.
 - Printed textual or graphical results of individual queries and query families.

AHQ provides a full-featured tool for constructing queries and reports. The only action necessary to construct a query is the designation of display fields. The actions of a typical AHQ session include identifying display fields, selecting desired qualification criteria to limit the number of records retrieved, and selecting display field sort order.

3.2.4 System Services (SS). SS includes the JOPES Core Database management subsystem for functional managers. SS provides the capability to load, modify, manipulate, and delete OPLAN data. SS allows restricted, authorized managers to create and manage OPLAN access and provide user access permissions to specific functions within OPLANs. The functional manager can manage the size of the JOPES Core Database by granting OPLAN initialization privileges and monitoring the number of created OPLANs including auditing, deleting, recovering, distributing, and restoring OPLANs, and OPLAN information. It is

useful for OPLANs, multiple OPLANs, and Rapid Deployment Data planning. SS was formerly Information Resource Management (IRM).

- **3.2.5** Requirements Development and Analysis (RDA). RDA allows planners to analyze and edit TPFDDs and determine the transportation feasibility of a course of action. The RDA provides the capability to create, add, modify, delete, and generate output on deployment-related information contained in an OPLAN TPFDD. The TPFDD edit capability is especially useful for deliberate or peacetime planning and Crisis Action Planning. Capabilities include plan creation and maintenance, requirements generation and maintenance, availability of unit information, force module development and maintenance, availability of reference file information, and pre-defined reports retrieval and generation.
- **3.2.5.1 Initialization.** The RDA application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **RDA** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, RDA is invoked by pressing the **START** icon next to "Requirements Development & Analysis" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, RDA is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Requirements Development & Analysis" text and pressing <enter>.
- **3.2.5.2 User Inputs.** Operator-defined inputs to RDA include: Creation of and modifications to Force and non-unit requirements, TUCHA file updates, transportation flow analysis, ULN sourcing, and Force Module creation.
- **3.2.5.3 System Inputs.** System inputs to the RDA application include changes to OPLANS, Reference Files, and GSORTS, which are immediately available upon initialization.
- **3.2.5.4 Termination.** RDA termination procedures involve selecting the **Exit** option on the RDA menu within the RDA main window.
- **3.2.5.5 Restart.** Not applicable.
- **3.2.5.6 Outputs.** RDA outputs consist of OPLAN requirements and changes made to any of the user-defined or system inputs. The outputs are sent to the GCCS integrated database.
- **3.2.6 JOPES Navigation (JNAV).** A navigation window that can be called up from a single icon on the GCCS Desktop Main Window. JNAV provides JOPES icons to launch the various JOPES applications without leaving the JOPES environment. JNAV consists of a number of applications that are traditionally divided into three categories: Requirements Planning and Execution, Deliberate Planning tools, and Functional Management. The application described manifests itself as an icon on the desktop. Opening the JOPES icon brings up a window pre-loaded with a form providing instructions to launch the application. The JNAV Client Segment consists solely of HyperText Markup Language (HTML) documents and UNIX scripts. See the *JOPES User's Guide Update* for a sample JNAV window.

The JNAV window is used to provide access to the various JOPES applications within GCCS. These JOPES based applications fall into the following six major categories:

- Requirements Planning
 - Requirements Development & Analysis (RDA)
 - Force Module Processing (FMEDIT) (not yet available)
 - Resources and Training (GSORTS).
- Transportation/Scheduling
 - Scheduling and Movement (S&M)
 - Transportation Analysis (JFAST)
 - TCC External System Interface (ESI).
- Sustainment Modeling
 - Civil Engineering (JEPES)
 - Sustainment Planning (LOGSAFE)
 - Force Augmentation (FAPES) (not yet available)
 - Medical Planning (MEPES)
 - Personnel Planning (NPG). (Non-Unit Personnel Generator is not yet available.)
- Reports and Retrievals
 - AdHoc Queries (AHQ)
 - Pre-defined Reports
 - JSIT Commands. (See the *JOPES User's Guide*.)
- Resource Services
 - System Services (SS)
 - Reference Files Administration (RFA).
- Communications
 - Internet News (TLCF)
 - Internet Chatter (TLCF).

The JNAV window appears in two different formats based on the user interface. The first interface is a GUI where the operator selects a JOPES application by clicking on the particular **START** icon to the far left of the application name. In addition, the operator can obtain information about an application by selecting the Information sign located between the START icon and the application name. Gray icons denote those applications that are not available based on the operator's user ID. The *JOPES User's Guide Update* can be invoked by clicking on **User Guide** located at the bottom left of the JNAV window. A list of acronyms and help topics is also available by clicking on the applicable underlined letter after "JOPES Encyclopedia" at the bottom of the window.

The second JNAV window has a text-based format. For this text-based interface, move the cursor to the desired location by pressing <tab>. After the cursor is over the desired application press <enter> to invoke the application or access the desired help information. The *JOPES User's Guide Update*, list of acronyms, and help topics are also accessed via the use of <tab> and <enter> within the text-based JNAV window.

Both the GUI-based and text-based versions of JNAV are invoked by double clicking on the **JOPES** icon

within the main GCCS launch window.

- **3.2.7 Pre-defined Reports (PDR).** Allows the user to generate various reports with pre-defined formats that give detailed requirements data, force module data, and results of OPLAN analyses. The reports access the S&M GCCS Core database via the JNAV segment and are dependent on that segment. The initial JOPES PDR Netscape-based window lists the various reports under six functional areas:
 - Requirements Detail Group
 - Movement Requirements Group
 - Force Module Group
 - OPLAN Analysis Group
 - Reference File Group
 - Transportation.

To activate a report under any group, click on the respective icon. Click on the report title (appearing to the user as underlined text) to obtain help information for that specific report. In general, JOPES reports are based on either OPLAN or Reference File data. For those reports using OPLAN data, the next window to be displayed is the OPLAN selection window. When the user selects a desired OPLAN, the requirements selection window is displayed. This window allows the user to specify the selection criteria, thus indicating the collection of requirement records to be processed for the report. The PDR application also allows the user to preview the report output in the window prior to sending the data to the printer. Details of the available reports can be found in the SUM.

- **3.2.7.1 Initialization.** The PDR application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **PDR** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, PDR is invoked by pressing the **START** icon next to "Reports" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, PDR is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Reports" text and pressing <enter>.
- **3.2.7.2 User Inputs.** User inputs are based on operator actions to generate the various JOPES-related reports listed and described in the Outputs section.
- **3.2.7.3 System Inputs.** None.
- **3.2.7.4 Termination.** The JOPES PDR application is terminated by selecting the **Exit** option in the File menu on the JOPES PDR Netscape window.
- **3.2.7.5 Restart.** Not applicable.
- **3.2.7.6 Outputs.** The JOPES PDR application provides outputs based on five Report Groups: Requirements Detail, Movement Requirements, Force Module, OPLAN Analysis, and Reference File Paging.
- **3.2.8** Logistics Sustainment Analysis and Feasibility Estimator (LOGSAFE). LOGSAFE is a logistic sustainment modeling capability that assists logistics planners in determining sustainment requirements during deliberate and crisis action planning. Non-unit material requirements can be automatically posted to the appropriate TPFDD. LOGSAFE has the capability to receive specialty support data from JEPES and

Medical Planning and Execution System (MEPES) applications for generating associated non-unit related cargo records. LOGSAFE provides estimates for movement during execution of OPLANs and Course of Actions (COAs) as well as providing sustainment movement requirements data needed for transportation feasibility analysis. (This application also provides the capability to align movement requirements with strategic movement requirements.)

- **3.2.8.1 Initialization.** The LOGSAFE application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **LOGSAFE** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, LOGSAFE is invoked by pressing the **START** icon next to "Sustainment Planning" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, LOGSAFE is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Sustainment Planning" text and pressing <enter>.
- **3.2.8.2 User Inputs.** The operator enters modifications to logistics modeling parameters.
- **3.2.8.3 System Inputs.** TPFDDs and six different LOGSAFE reference files comprise the system inputs to LOGSAFE. These LOGSAFE reference files include: COUNTRY, GEOLOC, Logistics Factors File (LFF), TUCHA, Ports of Support File (POSF), and Unit Type Code (UTC) Consumption Factors File (UCFF).
- **3.2.8.4 Termination.** The LOGSAFE application is terminated by clicking the left mouse button on the **Exit** button within the LOGSAFE main window. Next, the user must click on **OK** in the pop-up confirmation window.
- **3.2.8.5 Restart.** Not applicable.
- **3.2.8.6 Outputs.** This application generates logistics resupply requirements for a specific OPLAN in the form of CINs and ULNs. These CINs and ULNs are returned to the Information Management Subsystem (IMS).
- **3.2.9 Medical Planning and Execution System (MEPES).** MEPES provides contingency medical support information for allocating medical resources. It assists medical planners during both crises and deliberate planning by quantifying the impact of an OPLAN or COA on the medical system, and providing a monitoring capability during execution. It also provides combatant command medical planners with a tool to quantify potential impact of an OPLAN on theater medical systems. MEPES will forecast the theater medical resource requirements based on war fighting scenario and support time-phased medical sustainability analysis by generating estimates of time-phased casualties by type, medical evacuees, and returns to duty. MEPES provides data to LOGSAFE. It replaces the JOPES Medical Planning Module. MEPES functionality is described in greater detail in the SUM.
- **3.2.9.1 Initialization.** The MEPES application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **MEPES** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, MEPES is invoked by pressing the **START** icon next to "Medical Planning" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, MEPES is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Medical Planning" text and pressing <enter>.

- **3.2.9.2 User Inputs.** The user inputs to the MEPES application are based on operator actions to perform the following:
 - Create, update, delete, and print Service approved scenarios for inclusion in the GCCS Medical Reference Database (MRD).
 - Create, update, delete, and print Population at Risk (PAR) records.
 - Create and update planner-defined OPLAN dependent medical parameters required in the execution of the MEPES Personnel Loser Generator (PLG)/Medical Planning Module (MPM) computational processes.
 - Create up to six uniquely-defined Medical Working Files (MWFs) (for the Service medical planner) or up to six uniquely-defined Joint Medical Working Files (JMWFs) (for the Joint medical planner).
 - Develop a time-phased Unit Type Code (UTC) listing of hospital UTCs whose bed mix approximates the bed mix calculated by the MEPES computational process.
 - Develop Non-Unit Related Personnel (NURP) and Non-Unit Related Cargo (NURC) TPFDD data elements for the STRAT MEDEVAC TPFDD, the Aeromedical Evacuation (AE) crew Recovery TPFDD, the Supply Class VIIIA Resupply TPFDD, the Supply Class VIIIB Resupply TPFDD, and the AE Related Equipment Recovery TPFDD.
- **3.2.9.3 System Inputs.** None.
- **3.2.9.4 Termination.** The MEPES application is terminated by pressing the <F12> function key or the **Exit** command button on the MEPES main window.
- **3.2.9.5 Restart.** Not applicable.
- **3.2.9.6 Outputs.** The MEPES application reports can be found in the SUM.
- **3.2.10 Joint Engineer Planning and Execution System (JEPES).** Assists the planner in developing the Civil Engineering Support Plan (CESP) appendix to an OPLAN. JEPES allows the planner to add, delete, modify, and analyze data in the JEPES database. It also provides the capability to import and export the JEPES database. JEPES extracts pertinent TPFDD data computes facility requirements and determines if adequate facilities exist to support deployed forces. This application creates construction requirements based on relative engineering priority and capability at each base complex. JEPES provides data for logistics sustainability analysis and data used by the LOGSAFE segment.
- **3.2.10.1 Initialization.** The JEPES application and main window can be invoked by two methods. The first method is by double clicking the left mouse button on the **JEPES** icon within the GCCS desktop main launch window. The second method is via the JNAV application. For those systems with a GUI-based JNAV window, JEPES is invoked by pressing the **START** icon next to "Civil Engineering" within the JNAV Netscape-based GUI window. For those systems with a text-based JNAV window, JEPES is invoked by moving the cursor via <tab> to the START indicator immediately to the right of "Civil Engineering" text and

pressing <enter>.

3.2.10.2 User Inputs. User Inputs to the JEPES application are divided into three categories: Civil Engineering Files (CEFs), TPFDD data, and Reference Files.

- CEFs:
 - OPLAN independent files:
 - MASTER File
 - · Planning Factor (PLNGFACT) File
 - · Component (CMPNT) File
 - · Engineering Capability (ECAPB) File.
 - OPLAN dependent files:
 - · ASSET File
 - ASSETHN File
 - CARDS Files (Base Complex, Base Location, Backup Supply, Base Facility Construction Policy, Plan Facility Construction Policy, Planner Input Requirements, Engineering Support).
- TPFDD data:
 - TROOP file.
- Reference Files:
 - FACILITY CATEGORY File
 - GEOLOC File.
- 3.2.10.3 System Inputs. None.
- **3.2.10.4 Termination.** Within JEPES, the <Esc> key is used to back up to the previous menu. Once at the Main menu, the user can exit JEPES by pressing the <Esc> key.
- **3.2.10.5 Restart.** Not applicable.
- **3.2.10.6 Outputs.** JEPES produces the following outputs:
 - Printed reports that illustrate discrepancies between database tables.
 - Printed reports that highlight the facility requirements for unit-allocated, planner facility, population, and base forces.
 - Graphics that display base population data, time-phased population growth over an entire OPLAN, and time-phased requirements data for up to four specific facility category codes at a specific base complex.
 - Printed reports that list all asset-satisfied and asset-unsatisfied requirements.

- Printed reports for all construction requirements, construction requirements for a specified region and/or time constraint, and construction requirements within an analysis period.
- Printed reports of the Class IV material requirements needed to support the civil engineering activity in a given area of operation. This information is also used to produce a LOGSAFE text file that can be passed to the LOGSAFE application.
- Logistics Sustainability Analysis (LSA) data graphs that can be generated for six sub-elements:
 Airfields; Seaports; Petroleum, Oil and Lubricants (POL) Storage/Distribution; Non-POL
 Storage/Distribution; Troop Support; and Utilities. The operator can display graphs producing
 the lowest percentage for each infrastructure sub-element by time period, lowest level of
 sustainability for each infrastructure sub-element and percent available for each sub-element. In
 addition, LSA data can be stored in a text file to be passed to the LSA system.
- **3.2.11 Joint Flow and Analysis System for Transportation (JFAST).** JFAST is used to determine the transportation feasibility of an OPLAN or course of action, produce air and sea lift requirements, make closure estimates, determine optimum transportation mode, assess attrition effects, identify shortfalls, and determine gross lift capability. Users can specify conditions for meeting a transportation profile. JFAST uses a GUI on a 486 PC client-to-server database.
- **3.2.11.1 Initialization.** Once the JFAST PC CPU and monitor are powered up, the TIGERSAFE screen will be displayed along with a series of system startup messages. JFAST PC login procedures are executed via two logins. The first login is the TIGERSAFE login, where the user enters the appropriate TIGERSAFE password. The second login involves entering a valid JFAST user name and password, which displays the TIGERSAFE User's Menu.
- **3.2.11.2 User Inputs.** Operator actions that generate changes to Force Modules for answering "What If ..." questions regarding feasibility of transportation. Additional operator actions involve creating ad hoc queries where various data items are modified for analysis by JFAST. These modified data items include Ports of Embarkation (POEs), Ports of Debarkation (POD), Earliest Arrival Date (EAD), Latest Arrival Date (LAD), etc. The JFAST application normally operates on a user-defined TPFDD; however, a TPFDD is not mandatory. The JFAST Notational Requirements Generator (NRG) module provides the capability to develop a notational force list for estimating various transportation requirements.
- **3.2.11.3 System Inputs.** Transportation requirements derived from TPFDD regarding the transport of personnel and cargo. Reference files for JFAST include: Geographical Location File (GEOFILE), Type Unit Characteristics (TUCHA), Assets for Planning (ASSET), and Characteristics of Transportation (CHSTR). Non-JOPES inputs include: Sea scheduler reference data for use by the Sail Algorithm, NRG reference data, and other transportation reference data related to AMC, MSC, and MTMC.
- **3.2.11.4 Termination.** Move mouse pointer to the **Exit** button on the main JFAST screen and click left mouse button to terminate JFAST processing.
- **3.2.11.5 Restart.** Not applicable.
- **3.2.11.6 Outputs.** Hard copy report of transportation feasibility based on analysis performed in JFAST.

- **3.2.12 Dynamic Analysis and Replanning Tool (DART).** DART will reside on the Sun SPARCserver. It is a TPFDD editor and analysis tool used by planners and analysts to generate or modify selected TPFDDs. DART will be replaced by RDA.
- **3.2.12.1 Initialization.** DART functionality is invoked by double clicking the left mouse button on the **DART** icon within the main launch window.

NOTE: DART is not under the JNAV launch icon.

- **3.2.12.2 User Inputs.** Operator defined inputs to DART include: modifications to TPFDD requirements, TUCHA file updates, Transportation Flow Analysis, Unit Information (UI) file updates, ULN sourcing, Force Module creation, and TPFDD creation.
- **3.2.12.3 System Inputs.** TPFDDs are sent from the IMS. In addition, the Reference File Manager (RFM) transfers standard reference files to DART. These reference files include: GEOFILE, ASSETS file, CHSTR file, TUCHA, and the JOPES F6 extract of the UI file.
- **3.2.12.4 Termination.** DART termination procedures involve selecting the **Exit Dart** option from the File menu on the main button bar within the main DART window.
- **3.2.12.5 Restart.** Not applicable.
- **3.2.12.6 Outputs.** Modified UI files, OPLAN requirements, and changes made to any of the user defined or system inputs.

3.3 GCCS Support Applications

- **3.3.1 Automated Message Handling System (AMHS).** AMHS provides a user-friendly way to send and receive messages via the Automated Digital Network (AUTODIN). It provides connectivity to and interoperability with other Government Agencies, allies, tactical users, defense contractor's, and other approved agencies external to the Defense Message System (DMS) community. AMHS has the capability to create, coordinate, validate, and release an AUTODIN message as well as receive, organize, view, and print incoming AUTODIN traffic. It also provides guaranteed delivery to the intended recipients, and maintains writer-to-reader accountability. Additionally, AMHS supports the automated capability to update various databases from formatted AUTODIN message traffic. Several applications rely on this automated capability (e.g., GCCS Reconnaissance Information System [GRIS], GSORTS, Evacuation System [EVAC] and some Service-unique applications). AMHS has the Message Manager and Message Text Format Editor components.
- **3.3.1.1 Initialization.** AMHS is invoked by double clicking the left mouse button on the **AMHS** icon within the main launch window. Upon successful activation, the TOPIC introduction window is displayed along with legal notices about the software copyright. These are followed by a main TOPIC window called the Query Manager window.
- **3.3.1.2 User Inputs.** Users inputs involve actions by the operator to view, print, or delete selected messages.

- **3.3.1.3 System Inputs.** Incoming messages are received via AUTODIN.
- **3.3.1.4 Termination.** AMHS is terminated by moving the pointer to the File menu on the Query Manager window and selecting the **Exit AMHS** option.
- **3.3.1.5 Restart.** Not applicable.
- **3.3.1.6 Outputs.** Messages are transmitted to AUTODIN.
- **3.3.2 APPLIXware Office Automation Software.** APPLIXware provides word processing, spreadsheet, and graphics functionality. APPLIXware is selected by choosing Tools from the top GCCS menu bar, then Words, Graphics, or Spreadsheets from the menu. APPLIXware is a collection of COTS applications consisting of four distinct processing applications: Applix Words, Applix Spreadsheets, Applix Mail, and Applix Power Brief. These applications share a common layout and design structure and are integrated allowing the user to transport material among applications. The user can create a spreadsheet, import into a text file, add graphics to a document, create a slide from the data, and mail it to another workstation—all within the APPLIXware environment. APPLIXware also provides comprehensive on-line help and individual tutorials for the user.

The six related APPLIX ware manuals (dated October 1993) produced by the APPLIX Corporation that describe the functionality in detail include:

- Applix Getting Started
- Applix Words
- Applix Spreadsheets
- Applix Graphics
- Applix Mail
- Applix Macros.

There are two methods to access APPLIXware software within GCCS. The first method is to select either the Words, Graphics, Spreadsheets, Mail, or Macros options under the Tools menu on the GCCS menu bar. The second method is to double click the left mouse button on the APPLIX icon within the main launch window. The main APPLIXware window is displayed on the screen containing five icons that represent (from left to right) the following applications:

- Word Processing
- Graphics
- Spreadsheets
- Mail
- Data (not available in GCCS).

Additional details describing APPLIXware can be found in the SUM.

3.3.3 Command Center Applications (CCAPPS). The GCCS Command Center Applications (a suite of headquarters command center applications) is tightly integrated with the GCCS Executive Manager. It is a set of integrated applications providing the following operational capabilities: Staff Journal, Information Management, End User General Database Applications, Suspense/Tasking, Messaging, and a Folder System

that underlies all the Command Center Applications.

- **3.3.4 Teleconferencing.** Teleconferencing consists of Internet Relay Chat (IRC), NewsGroups (NEWSGROUPS), Netscape (NETSCAPE), Netsite (NETSITE) segments, and MOSAIC. Additional information on Teleconferencing can be found in Section 4.5, the *GCCS Teleconferencing User's Manual*, and the *JOPES User's Guide Update*.
- **3.3.4.1 Internet Relay Chatter (IRC).** IRC is a Common Application implemented as a network of IRC servers. Users interact with IRC via IRC clients. A user invokes an IRC client and directs the client to connect to a server. Once connected, the client indicates to the server which channels the client has joined. The server transmits to the client all messages on those channels. IRC is non-persistent in that messages are not saved. It is also very interactive. When a user types a message on the screen, it is very quickly transmitted to all other users currently connected to that conference. However, when a message is sent while a user is not connected, that user cannot see that message.
- **3.3.4.2** NewsGroups (NEWSGROUPS). NewsGroups is designed as a network of servers to which clients attach to obtain the latest news related information. The COTS software package provided in GCCS is called NEWSGROUPS X-Windows Read News (XRN). NewsGroups provides text-based, non-persistent, non-real-time news access where multiple NewsGroups can exist simultaneously on the Internet. This product allows users to select a NewsGroup, select a specific article, follow a given NewsGroup thread, upload files, and download files in text format. The subscription list for a news group is user-defined, thereby permitting limited access to messages posted within any news group. Users can read, print, reply to listed messages, or post new messages. New messages are posted to a central server for each news group and are, in turn, distributed to all servers that receive that particular news group. Once posted at the distant server, users can view and print the new message. Information on launching Newsgroups can be found in Section 5.3.6.1 of the *Jopes User's Guide Update*.
- **3.3.4.3 NETSCAPE** (Netscape). Netscape, along with Netsite, provides replacement functionality for the WWMCCS Intercomputer Network (WIN) teleconferencing as a client/server product capable of communicating over Transmission Control Protocol (TCP)/Internet Protocol (IP) protocols. Netscape is a commercial software package that provides the capability to explore the World Wide Web (WWW), multimedia and Internet text-based mediums.
- **3.3.4.4 NETSITE (Netsite).** Netsite is a commercial product like Netscape that replaces WIN Teleconferencing functions. It is the server segment of a client/server product communicating using TCP/IP protocols. Netscape and Netsite were acquired, modified, and configured from public domain sources.
- **3.3.4.5 MOSAIC.** The MOSAIC utility is a browser that enables operators to review and download documents located on the WWW over a Wide Area Network (WAN). MOSAIC will be used over the SIPRNET as an entry point to the GCCS On-line Access Library (GOAL), which is used to access on-line GCCS documentation such as application user's manuals, etc. In addition, the GOAL will eventually provide a means for Government and military organizations to update GCCS software segments and documentation.
- **3.3.4.5.1 Initialization.** The MOSAIC application is invoked by double clicking the left mouse button on the **MOSAIC** icon within the main launch window. The MOSAIC Main Menu is displayed as a result of this action.

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